


Applicants request entry of this amendment in adherence with 37 C.F.R. §§1.821 to 1.825. This amendment is accompanied by a floppy disk containing the above named sequences, SEQ ID NOS:1-6, in computer readable form, and a paper copy of the sequence information which has been printed from the floppy disk.

The information contained in the computer readable disk was prepared through the use of the software program "PatentIn" and is identical to that of the paper copy.

Attached hereto is a marked-up version of the changes made to the Specification by the current Amendment. The attached pages are captioned "**VERSION WITH MARKINGS TO SHOW CHANGES MADE.**"

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,


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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

Paragraph beginning at line 21 of page 106 has been amended as follows:

B. subtilis cotC was cloned under the control of its own promoter into an expression vector or cassette that contains both gram positive and gram negative origins of replication. A linker consisting of the HA11 epitope and restriction enzyme sites was engineered into cotC (SEQ ID NOS:1 and 2) between the codons encoding amino acids 27 and 28 (~~SEQ ID NO: 1~~). The inserted sequence is amino acid residues 28-47 of the polypeptide encoded by SEQ ID NO:1 ~~SEQ ID NO: 1~~. The HA11 epitope is residues 32-43 of the polypeptide encoded by SEQ ID NO:1 ~~SEQ ID NO: 1~~. The nucleotide sequence encoding the wild type V antigen from *Y. pestis*, the causative agent of bubonic plague, was cloned in-frame into the PstI site in the linker. This results in a construct encoding cotC, inserted into which is V antigen fused to the HA11 epitope. In this example the HA11 epitope is used to simplify detection and analysis. Monoclonal antibody to HA11 was raised against the twelve amino acid peptide, and it recognizes a 9 amino acid influenza hemagglutinin (HA) epitope, which has been used extensively as a general epitope tag in expression vectors. The extreme specificity of this antibody allows unambiguous identification and quantitative analysis of the tagged protein. The monoclonal antibody HA11 was purchased from Covance and used according to manufacturer's instructions for the particular assay. The nucleic acid sequence encoding the HA epitopic peptide sequence (either the twelve amino acid sequence or the nine amino acid sequence) was engineered to include two sets restriction sites downstream (BamH I and PST I) and upstream (Kpn I and X ba I) of the epitope sequence for subsequent cloning.

Paragraph beginning at line 2 of page 110 has been amended as follows:

Two different expression constructs comprising lipase 396 were created. In one expression construct (Clone 16), the lipase 396 gene (SEQ ID NOS:3 and 4) (~~SEQ ID NO:2~~) is inserted in the CotC sequence between the codons encoding amino acids 27 and 28. Clone 16 expresses a fusion protein with fragments of CotC located N-terminally and C-terminally to the lipase 396 protein. In the second expression construct (Clone 19), the lipase 396 gene operably linked to a translational termination region were inserted in the CotC sequence between the codons encoding amino acids 27 and 28 of CotC. Clone 19 expresses a fusion protein of the N-terminal 27 amino acids of CotC with lipase 396. The translational termination region stops translation and prevents translation of the C-terminal portion of CotC.